

## Today's Topics:

Antennas  
DAYTON '90 !!  
FT-470, the continuing saga...  
Interception of E-Mail by spies  
The un-net on 10meters on Satur (2 msgs)

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Date: 16 Dec 89 01:03:30 GMT

From: wuarchive!cec2!news@eddie.mit.edu (Frank C. Robey X5569)

Subject: Antennas

Message-ID: <1989Dec16.010330.22182@cec1.wustl.edu>

In article <12549900427007@osu-20.ircc.ohio-state.edu> (Steve Bertsch) writes:  
>In a few magazine articles I've seen the terms 'near field' and 'far field',  
>but I can't find any mention of these terms in any of the radio or  
>electronics texts I've tried. Can anyone define these terms?

The definition that I use in my research is that far-field is when an arriving signal appears to be a plane wave across the aperture of the antenna or array. The transmitted signal will tend to expand spherically - that is, lines of constant phase take on a spherical shape. When the sphere appears to be a plane at the receiving array then the radiation source is in the far field. The deviation from being in a plane is usually specified to be within so many degrees or wavelengths, thus the near and far field boundary will vary with wavelength (frequency), and antenna aperture (size).

There is also a MIL- spec. which has a similar definition, although I can't recall what the number is right now. It has something to do with RF interference susceptibility.

Frank Robey  
fcr@saturn.wustl.edu

-Gonna get my ticket one of these days.

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Date: 16 Dec 89 01:39:09 GMT

From: cs.utexas.edu!usc!brutus.cs.uiuc.edu!ux1.cso.uiuc.edu!ux1.cso.uiuc.edu!  
phil@tut.cis.ohio-state.edu

Subject: DAYTON '90 !!

Message-ID: <30500327@ux1.cso.uiuc.edu>

> DAYTON is coming up soon and will be here faster than you think  
> (APRIL 27, 28, and 29). There was some talk about a USE-NET meeting as  
> well as a calling frequency. This year we should try the same. I would  
> like to nominate 223.60 (dir) as the calling channel as 2 meters is  
> useless.

How about ALSO having 440.60 for us higher ups? Maybe someone can bring  
a simplex crossband repeater between these two bands and run it in their  
car in the parking area?

--Phil Howard, KA9WGN--  
<phil@ux1.cso.uiuc.edu>

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Date: 15 Dec 89 23:16:07 GMT  
From: zaphod.mps.ohio-state.edu!brutus.cs.uiuc.edu!jarthur!uci-ics!  
turner@tut.cis.ohio-state.edu (Clark Turner)  
Subject: FT-470, the continuing saga...  
Message-ID: <25897B37.3442@paris.ics.uci.edu>

Bill writes:

>Yaesu's FT-23R have this "tracking" front-end. They removed it in hopes of  
>achieving a more sensitive rcvr in the -411 and -470. Oops. Works great in  
>the faraday-cage lab, but otherwise.... As reported earlier, they have the  
>"fix" for this for the -470, just send your radio in to them. Why it's  
>not a similar repair for the -411 is not clear to me.  
>  
>Bill -KI6DG

I am quite curious about other owners of the FT470 and their experiences with  
the intermod problem. As Bill explains, there is a "fix" whereby the IF  
frequencies are changed in the HOPES of avoiding the local signals. The  
Yaesu engineer at Cerritos which I spoke to said that such a change was  
UNLIKELY to help in the general case. He said that the "fix" was used for  
some specific problems that occurred out in Illinois (somewhere in the  
midwest) where the IF was under direct attack by a local 2KW repeater signal.

Has anyone else out there asked Yaesu for the "fix" and what were the results?  
I am hesitant to send my radio away for several weeks for the "fix"  
(which they offered to do) if the improvement is marginal. The radio is  
usable to me as it stands, and I like it in my hand rather than out at the  
shop. Any other info?

P.S. Apparently Yaesu has just brought the price of the Ft470 down by about  
\$50.00! It is now the cheapest (at the local ham emporium) of the big  
three (Kenwood, Icom, Yaesu) - but the alternative Alinco - which is a bit  
stripped down - is yet cheaper.

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Clark S. Turner  
WA3JPG  
turner@ics.uci.edu  
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"When the going gets weird,  
the weird turn pro."  
-Hunter Thompson

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Date: 15 Dec 89 23:34:59 GMT  
From: cs.utexas.edu!hellgate.utah.edu!cs.utah.edu!thomson@tut.cis.ohio-state.edu  
(Rich Thomson)  
Subject: Interception of E-Mail by spies  
Message-ID: <1989Dec15.163459.11586@hellgate.utah.edu>

In article <30036@shemp.CS.UCLA.EDU> pierce@lanai.UUCP (Brad Pierce) writes:  
>Incidentally, what is the constitutional basis for the  
>"National Security" justification that seems to outweigh  
>all other considerations?

It is not a power explicitly derived from the Constitution. It comes from the National Security Act of 1947, the piece of legislation signed by Truman that formed the National Security Council -- a select group of appointed people that reports only to the president. See Bill Moyer's excellent work "The Secret Government: Constitution in Crisis" for an analysis of the NSA/NSC with regards to the constitution in the context of the Iran-Contra scandal.

>Which agencies of the government  
>have the right to classify different information as secret  
>and which have the right to review these decisions?

I believe that the NSC has both the right to classify and declassify information, but I'm not sure about subordinate groups (FBI, CIA, etc).

>-- Brad

-- Rich

Rich Thomson thomson@cs.utah.edu {bellcore,hplabs,uunet}!utah-cs!thomson  
"Tyranny, like hell, is not easily conquered; yet we have this consolation with us, that the harder the conflict, the more glorious the triumph. What we obtain too cheap, we esteem too lightly." Thomas Paine, \_The Crisis\_, Dec. 23rd, 1776

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Date: 16 Dec 89 00:15:00 GMT  
From: zaphod.mps.ohio-state.edu!unix.cis.pitt.edu!brutus.cs.uiuc.edu!  
ux1.cso.uiuc.edu!ux1.cso.uiuc.edu!phil@tut.cis.ohio-state.edu  
Subject: The un-net on 10meters on Satur

Message-ID: <30500328@ux1.cso.uiuc.edu>

It would be nice if the ARRL were to schedule the 10 meter contest (which proportionally should interest college students more, since that tends to be a place where lots of new novices and techs concentrate) at a time when it is NOT getting into FINALS WEEK for colleges and universities.

Can someone suggest a better time? It needs to be between the latest term starting times (late Sept and early Feb) and a few week BEFORE finals (i.e. mid Nov and early April) and must avoid SPRING BREAK. These are the times most students can reasonably expect to be interested in operating, given their usually hectic studying schedules that always get worse as the terms progress.

--Phil Howard, KA9WGN--  
<phil@ux1.cso.uiuc.edu>

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Date: 16 Dec 89 00:23:00 GMT  
From: zaphod.mps.ohio-state.edu!unix.cis.pitt.edu!brutus.cs.uiuc.edu!  
ux1.cso.uiuc.edu!ux1.cso.uiuc.edu!phil@tut.cis.ohio-state.edu  
Subject: The un-net on 10meters on Satur  
Message-ID: <30500329@ux1.cso.uiuc.edu>

> frequencies. You not allowed to be on the standard fm simplex frequencies  
> like 146.52. They've gone so far as to completely eliminate any possibility  
> of getting more people interested in the activity by people being aware  
> that the activity is occurring.

I don't want some contest overrunning the whole band. I'd like to see ALL contests restricted to some portion of each band they operate on so that those who don't want to operate the contest can still find a frequency.

> Yes, I admit that contests have a severe habit of disrupting normal net  
> operations. I don't really have a good answer for that either. Even  
> if you set up restrictions on where the testers can play, there will  
> be a net in that particular portion that gets derailed, and thus people  
> get upset. There are no restrictions on where nets can be set up after

Rotate the positions. Nets are not playing by rules (besides FCC).

> all! Gee, maybe net operations should be restricted to certain areas  
> of the bands. ;-) Point is that depending on which activity your

By whom?

> playing at(which you nominally assume is the most important thing going ;-)

> your going to be upset when someone else interferes with it.

> The best answer seems to be to try to be as tolerant as possible of  
> all activities, and understand that what the other fellow is doing  
> is just as important to him as your pursuits are to you.

How do you tolerate an invasion? At least nets stick to their frequency.

--Phil Howard, KA9WGN--  
<phil@ux1.cso.uiuc.edu>

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End of INFO-HAMS Digest V89 Issue #1025  
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